A WEEKLY DIARY STUDY ON THE BUFFERING ROLE OF SOCIAL SUPPORT IN THE RELATIONSHIP BETWEEN JOB INSECURITY AND EMPLOYEE PERFORMANCE

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In this article, the authors used a within-person design to examine the relationship between job insecurity and employee in-role and extra-role performance, and the buffering role of time-varying work-based support (i.e., supervisor and colleague support) in this relationship. Weekly diary data gathered over the course of three weeks from 56 employees confronted with organizational restructuring and analyzed with a hierarchical linear modeling approach showed that weekly fluctuations in job insecurity negatively predicted week-level in-role performance. As predicted, supervisor support moderated the intra-individual relationship between job insecurity and in-role performance, so that employees' in-role performance suffered less from feeling job insecurity during weeks in which they received more support from their supervisor. No relationship between job insecurity and extra-role performance was observed. This within-person study contributes to research on job insecurity that has primarily focused on inter-individual differences in job insecurity and their associations with job performance. Theoretical and practical implications for human resource management are discussed. © 2012 Wiley Periodicals, Inc.

Keywords: job insecurity, job demands, job stress, social support, uncertainty management

Introduction

In recent decades, working life in many countries has been characterized by important organizational changes (e.g., closing, mergers, acquisitions), often accompanied by large-scale layoffs. Organizations frequently are engaged in changes and even invest in many change programs simultaneously (Franken, Edwards, & Lambert, 2009). Such far-reaching organizational changes may increase feelings of job insecurity and affect job performance. Moreover, the financial

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Human Resource Management, March–April 2012, Vol. 51, No. 2. Pp. 259–280

Published online in Wiley Online Library (wileyonlinelibrary.com).
DOI:10.1002/hrm.21465

crisis of 2007–2010 may have aggravated the frequency and severity of changes being made in organizations. Results of a 2008 census in Europe and the United States incorporating 600 senior managers seem to support this view. Almost two-thirds of the respondents indicated that the change initiatives planned for the next year were at least partly due to the global economic conditions (Economist Intelligence Unit, 2008). Taken together, the current dynamic work environment appears as a staging ground for increased feelings of job insecurity among employees.

Job insecurity refers to employees' feeling that their job is at risk or that they are likely to face job loss (Grunberg, Moore, & Greenberg, 2006). The literature treats job insecurity as a negative phenomenon, since a large body of research has demonstrated that when people feel insecure about their job, they have more negative job attitudes and more health-related problems (Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002). Less agreement exists with regard to the relationship between job insecurity and job performance, with the majority of studies suggesting that job-insecure employees perform worse than job-secure employees (for a meta-analysis, see Cheng & Chan, 2008).

We argue that job insecurity fluctuates over time, and that employees will show higher job performance when they feel secure about the future of their jobs.

The present study aims to contribute to the understanding of the job insecurity–job performance relationship by addressing two important research issues that have received relatively little empirical attention. First, we examine an intra-individual model linking job insecurity, conceptualized as a more or less continuous and chronic job stressor, to job performance. We argue that job insecurity fluctuates over time, and that employees will show higher job performance when they feel secure about the future of their jobs. Importantly, by adopting a within-person approach, we can rule out interpretations based on differences between persons, including personality and organizational factors, and shed new light on the mechanisms underlying the relationship between job insecurity and job performance.

Second, we contribute to the small but growing literature delineating and testing theoretically derived boundary (contextual) conditions of job insecurity from an HRM perspective. Organizations struggling to survive can generate job insecurity that ultimately will affect employee well-being and job performance, which can hopefully be counteracted by HRM initiatives such as increased support (see Gilbreath, 2008). In addition, Rosen, Chang, Djurdjevic, and Eatough (2010) recently concluded that research is needed that considers "how the work context [. . .] may explain why and when job insecurity is related to different types of performance" (p. 32). In responding to this call, we examine how the negative intrapersonal effects of job insecurity on intra-role and extra-role performance may be alleviated by time-varying (fluctuating over time) work-based social support (i.e., supervisor and colleague support).

Theory and Hypotheses

The Relationship Between Job Insecurity and Job Performance

Job insecurity has been recognized as one of the major stressors existing in the work environment, leading to a laundry list of disadvantageous outcomes, including negative attitudes toward the job or the organization, impaired health and well-being, and, most relevant to the present study, reduced job performance (Cheng & Chan, 2008; Gilboa, Shirom, Fried, & Cooper, 2008; Sverke et al., 2002).

The negative impact of job insecurity on employee performance can be theoretically understood in at least two broad ways: the first one focuses on cognitive explanations of job insecurity and the second one focuses on affect-based mechanisms to explain job insecurity.

The cognitive explanation departs from the idea that employees may perceive job insecurity as a breach of the psychological

contract with their employer. The psychological contract refers to the set of explicitly or implicitly given promises involving duties and entitlements between employer and employee, as perceived by the employee (Conway & Briner, 2005). Psychological contract theory defines job security as a key component of the so-called "old deal" (Millward & Brewerton, 2000), being predominantly characterized by a relational orientation providing job security on the part of the employer in exchange for loyalty on the part of the employee (Rousseau, 1995). A majority of the workforce still expects job security as a basic element of their psychological contract (De Cuyper & De Witte, 2007). Accordingly, for those who expect job security, job insecurity presents a violation of psychological contract expectations and produces an imbalance in the social exchange relationship between employee and employer (De Cuyper & De Witte, 2006, 2008). In order to restore balance to the exchange relationship after psychological contract breach has occurred, employees are often motivated to reduce their commitment (for instance, by engaging in withdrawal behaviors) and to contribute less to the organization in terms of job performance (Jensen, Opland, & Ryan, 2010; Sheppard, Lewicki, & Minton, 1992). According to this cognitive explanation, the interpretation of job insecurity as breach of contract is emphasized and work investment is deliberately reduced to restore balance/injustice, which, in turn, decreases levels of performance.

The affect-based explanation emphasizes that job-insecure employees are uncertain about what will happen in the future, be it job loss, loss of valued job features, or continued employment (Sverke et al., 2002). Uncertainty elicits feelings of powerlessness, alienation, and lack of control over their situation (De Witte, 1999; Sverke et al., 2002). Compared with individuals who perceive they have high levels of control, individuals who perceive they have little control are more likely to interpret the environment as stressful, have higher negative emotional responses, and exhibit more strain (Spector, 2002). Hobfoll's (1989) conservation of resources theory argues that in such stressful situations (i.e., high job insecurity) people will try to limit loss of (job) resources—for instance, by developing a detached attitude to the job, which in turn can lead to lower levels of performance (Bakker, Van Emmerik, & Van Riet, 2008). Along the same lines, Hockey's (1993) control model of demand management predicts that employees will mobilize extra resources to cope with the stressor (i.e., uncertainty), which in the long run will deplete the available resources that are needed to accomplish job tasks. Hence, this set of explanations broadly claims that feelings of job insecurity lead to a wearing out of the psychological and physical resources of the individual worker, and consequently result in decreased effort.

Empirical evidence is generally supportive of the view that job insecurity is negatively associated with various types of job performance. For example, high levels of job insecurity have been found to associate negatively with self-rated job performance (Armstrong-Stassen, 1993; De Cuyper & De Witte, 2006; Rosenblatt, Talmud, & Ruvio, 1999), creative problem solving (Probst, Stewart, Gruys, & Tierney, 2007), number of sales per employee (Loseby, 1992), and organizational citizenship behavior (OCB; King, 2000). Some studies, however, failed to find any significant association (Ashford, Lee, & Bobko, 1989), and a few studies even reported a positive association between job insecurity and job performance (Probst et al., 2007; Staufenbiel & König, 2010). Such inconsistent findings suggest the presence of moderating variables that may mitigate or even reverse the overall negative impact of job insecurity on job performance. In this study, we will examine the possibility that social support, and in particular supervisor and colleague support, moderate the job insecurity–performance relationship.

A Within-Person Analysis of the Job Insecurity–Performance Relationship

As mentioned earlier, most studies on job insecurity and job performance have

employed between-person designs to explore the extent to which both variables co-vary across individuals. The conclusion of these between-person studies is that individuals who experience high levels of job insecurity generally perform worse when compared with individuals who experience low levels of job insecurity (e.g., Cheng & Chan, 2008).

Between-person studies, however, may not apply to the intra-individual level. While between-person and within-person research may inform each other, they constitute domains of inquiry that are conceptually independent (Cervone, 2005). Both types of research may lead to different or even contradictory conclusions, in particular when the constructs under investigation fluctuate over time (Molenaar & Campbell, 2009). To the extent that intra-individual variation in job insecurity exists, within-person designs may yield different results from between-person designs. Schwartz and Stone (1998; see also Miner, Glomb, & Hulin, 2005) provide a good example of how different levels of analysis may yield different conclusions. A study using a between-subject design would find a negative relationship between exercising and blood pressure; individuals who exercise more have lower blood pressure. However, a study using a within-subject design would conclude the exact opposite; exercise and blood pressure are positively associated because when individuals are exercising, their blood pressure is elevated.

To the extent that intra-individual variation in job insecurity exists, within-person designs may yield different results from between-person designs.

There are good reasons to assume that job insecurity fluctuates over time, and hence, that a within-subject design is more appropriate for studying the relationship between job insecurity and job performance than a between-subject design. At its core, job insecurity has to do with uncertainty about one's future job situation. Uncertainty, defined as "an individual's perceived inability to predict something accurately" (Milliken, 1987, p. 136), can be very threatening, and people generally feel a need either to eliminate uncertainty or to find some way to make it tolerable and cognitively manageable (Van den Bos & Lind, 2002). Uncertainty can be produced by contextual factors that challenge people's assurance about their cognitions, perceptions, feelings, and behaviors (Hogg, 2001). Uncertainty about one's future job situation, for example, can be induced by events inside and outside the workplace. The announcement of a layoff by one's own firm or firms within the same industry may be a good example of this. Moreover, uncertainty levels may change rather quickly (Babrow & Kline, 2000). They may drop, for example, as reliable information becomes available about which positions within the organization are to be made redundant, or as positive forecasts for the labor market are published. Rumors and inconsistent communications, on the other hand, may result in an increase in uncertainty about one's job situation (Brashers, 2001; DiFonzo & Bordia, 1998). In other words, internal and external events may produce changes in levels of job insecurity among employees, in that the employee may worry about losing his/her job one week, but that concern may dissipate quickly, and the following week the person may feel assured; or, alternatively, the person may worry even more due to the ambiguous nature or lack of information.

To our knowledge, there are no studies that have examined intra-individual effects of job insecurity, and hence research is very limited in its ability to explicate intra-individual processes linking job insecurity to job performance. The present study attempts to address this gap by examining the possibility that job insecurity varies meaningfully within individuals over time (i.e., from week to week), and that these variations in job insecurity are associated with fluctuations in individual job performance.

The dynamic nature of job performance is well recognized (Beal, Weiss, Barros, & MacDermid, 2005; Fisher & Noble, 2004). Individuals are not always performing "at their best" and they perform better/worse at some times than at others. Employees typically

engage in two sorts of performances: in-role and extra-role performance. In-role or task performance is defined as those officially required outcomes and behaviors that directly serve the goals of the organization (Motowidlo & Van Scotter, 1994). Among other things, in-role performance includes meeting organizational objectives and effective functioning (Behrman & Perreault, 1984). Extra-role or contextual behavior is defined as employees' discretionary and voluntary behaviors that are believed to directly promote the effective functioning of an organization, without necessarily influencing a person's target productivity directly (MacKenzie, Podsakoff, & Fetter, 1991; P. M. Podsakoff & MacKenzie, 1994). Examples include willingness to help colleagues who have heavy workloads or volunteering for special work assignments. Based on recent evidence by Binnewies, Sonnentag, and Mojza (2009), who found that task performance and two types of extra-role performance (i.e., OCB, personal initiative) vary significantly within individuals on a daily basis, we expect both in-role and extra-role performance to show meaningful changes over time.

Accordingly, we do not only assess the influence of job insecurity on in-role performance, but also on extra-role performance, since research on the relationship between job insecurity and extra-role performance is relatively scarce (see Staufenbiel & König, 2010). We may expect, due to the voluntary nature of extra-role performance, this type of performance to fluctuate even more over time and to be more sensitive to contextual influences, such as varying levels of social support (see the next section). Accordingly, we split our hypotheses into expectations focusing on in-role performance and expectations focusing on extra-role performance in order to explore the potentially different association between job insecurity and both types of job performance.

Taken together, based on the conceptual analysis and related empirical evidence from between-person research presented earlier, we predict that employees perform worse in weeks in which they are uncertain about the continuation of their job (i.e., high job insecurity), as compared to weeks in which they feel assured (i.e., low job insecurity):

Hypothesis 1: Job insecurity will be negatively associated with in-role performance, so that employees will report lower levels of in-role job performance in periods where they experience more job insecurity, compared to periods when they experience less job insecurity.

Hypothesis 2: Job insecurity will be negatively associated with extra-role performance, so that employees will report lower levels of extra-role job performance in periods where they experience more job insecurity, compared to periods when they experience less job insecurity.

Social Support as a Buffer for the Negative Association Between Job Insecurity and Job Performance

We predict that employees perform worse in weeks in which they are uncertain about the continuation of their job (i.e., high job insecurity), as compared to weeks in which they feel assured (i.e., low job insecurity).

Given the adverse outcomes of job insecurity, researchers have spent a great deal of effort trying to identify factors that may buffer its effects. Results of previous studies already have shown that personality dispositions, such as internal locus of control (Näswall, Sverke, & Hellgren, 2005) and environmental variables, including perceived fairness (Kausto, Elo, Lipponen, & Elovainio, 2005) and perceived employability (Silla, De Cuyper, Gracia, Peiró, & De Witte, 2009), successfully buffer against the negative outcomes of job insecurity. In the present study, we will focus on the buffering effect of social support.

The term *social support* has been used widely to refer to the functions performed for the individual by significant others, such as family members, friends, and colleagues (Thoits, 1995). These significant others can provide different types of support, such as emotional (i.e., providing empathy, care, love, and trust), appraisal (i.e., transmission

of information relevant to self-evaluation), informational (i.e., helping individuals to help themselves), and instrumental support (i.e., various sorts of practical help) (Peeters & Le Blanc, 2001). These supportive functions are usually highly interrelated (e.g., Beehr, Bowling, & Bennett, 2010), and typically form a single underlying factor (Thoits, 1995), which is also the approach we take in this article.

Social support has often been cited as an important buffer against various workplace stressors (see Halbesleben, 2006; Thoits, 1995), including job insecurity (Lim, 1996, 1997). The underlying idea is that social support can mitigate the negative stress effects by helping individuals to cope with the stressor (i.e., job insecurity) more adequately. In addition to these findings, we expect in the present study that social support will fluctuate over time. Colleagues may provide social support in one week but may be too occupied with their own work to provide help in another week. While strain may emerge quickly when job insecurity is experienced, this process may be addressed quickly as well. For example, if an employee experiences social support, this could have a buffering effect on the experienced strain and thus prevent a drop in performance.

To examine the buffering capacities of social support, we make a distinction between support from work colleagues and support from the supervisor.

To examine the buffering capacities of social support, we make a distinction between support from work colleagues and support from the supervisor. Several studies on work stress have demonstrated the differential effects of colleague and supervisor support, although the findings seem inconclusive. For example, Peeters and Le Blanc (2001), in a sample of Dutch oncology care providers, found that social support by colleagues, but not by supervisors, was most effective in buffering the negative effects of job demands. Other studies, however, maintain that support from the supervisor may be more effective than collegial support in buffering the effects of work stress (e.g., Dormann & Zapf, 1999). In view of these inconsistencies, we conservatively assume that both colleague and supervisor support help employees in coping with job insecurity. We hold on to the distinction between both types of support in order to explore their possible differential effects on job performance.

Hypothesis 3: Social support from colleagues (H3a) and from the supervisor (H3b) moderates the negative effects of job insecurity on in-role performance, so that the intra-individual effect of job insecurity on in-role performance is more negative for employees with low than with high levels of support.

Hypothesis 4: Social support from colleagues (H4a) and from the supervisor (H4b) moderates the negative effects of job insecurity on extra-role performance, so that the intra-individual effect of job insecurity on extra-role performance is more negative for employees with low than with high levels of support.

Method

Procedure and Participants

The study required participants to complete a diary questionnaire every week for three weeks and a survey questionnaire at the start. Fifteen companies, located in Flanders, the Dutch-speaking part of Belgium,[1] were approached in autumn 2009 (shortly after the peak of the financial crisis) to participate in this study soon after they had publicly announced forthcoming restructuring measures, such as downsizing, mergers, acquisitions, relocations, and outsourcing. We adopted a two-stage sampling strategy, convincing organizational leaders first and potential participants at the second stage (Silla et al., 2009). In a first stage, human resource managers were contacted via e-mail and/or phone and asked for cooperation. Nine managers consented to participate, all of which worked for multinationals employing over 10,000 people worldwide. Three of the companies were financial institutions, two were food and beverage corporations, two were retail companies, one was

a provider of security services, and one was a car manufacturer.

In a second stage, a sample of employees of each company received an invitation e-mail sent by the human resource manager, in which participation was encouraged and in which the confidentiality and anonymity of responses were assured. The e-mail also contained a link to a web page that included a detailed description of the study and an electronic consent form. After completing the consent form, participants were directed to another web page where they completed the survey questionnaire, generated a personal identification code, and submitted their personal e-mail address.

Fifty-six individuals (with all companies equally represented) provided complete data and were sent an e-mail reminder every Thursday evening for three weeks to fill out the diary the following day. The reminder contained an address link to another web page, which hosted the diary questionnaire. The personal identification code was used to perform data linkage. We obtained 160 usable responses to the weekly diary questionnaires out of a possible 168 responses, yielding a 95.2 percent response rate across weeks and individuals.

The participants' average age was 33.2 (SD = 8.3). They had an average tenure at their organization of 6.8 years (SD = 6.1) with an average tenure in their current job of 5.6 years (SD = 4.0). Eighty-three percent of the participants had full-time jobs with an average working week of 38 hours (SD = 8.0). Forty-six percent of the participants were female. White-collar workers dominated the sample (81.8 percent). Eight percent of the participants occupied a management position, all of which reported supervising fewer than ten employees.

Measures

Questionnaire Data

Two types of general performance were assessed—namely, in-role performance and extra-role performance. Participants were asked to indicate the extent to which each statement characterizes them on a six-point scale ranging from 1 (*not at all characteristic*) to 6 (*totally characteristic*). *General in-role performance* was assessed with nine items developed by Goodman and Svyantek (1999). Sample items were "I achieve the objectives of my job" and "I fulfill all the requirements of my job." The Cronbach's alpha was .90. *General extra-role performance* was measured using seven items developed by Goodman and Svyantek (1999). Sample items were "I help other employees with their work when they have been absent" and "I willingly attend functions not required by the organization, but help in its overall image." The Cronbach's alpha was .88.

Weekly Diary Data

We focused on weekly changes. As Zaheer, Albert, and Zaheer (1999) argued, it is the variability in the phenomenon that one wishes to observe, that should guide the choice of the time scale (i.e., the length of the temporal interval used to test theory). All participants were in the midst of an organizational change process where speed of decision making may accelerate (Perlow, Okhuysen, & Repenning, 2002). As managerial decisions often generate new information relevant to the experience of job insecurity in employees, we opted for measuring changes in job insecurity at the level of weeks, not months. We deem the temporal level of weeks to be more sensitive to detect changes in job insecurity (and performance) than longer (e.g., monthly) time intervals that carry the risk of dismissing meaningful variation in job insecurity, especially in times of organizational change. For example, a month after the change onset, employees may have gained certainty about whether or not they can keep their job. Shorter (e.g., daily) intervals, on the other hand, may be too short for insecurity fluctuations to occur.

As managerial decisions often generate new information relevant to the experience of job insecurity in employees, we opted for measuring changes in job insecurity at the level of weeks, not months.

The weekly diary assessed state measures of job insecurity, supervisor support, colleague support, in-role performance, and extra-role performance. These measures reflect persons' levels for these characteristics on the specific occasions tested. All state measures were rated on a six-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Diary survey items were selected from validated and reliable scales on the basis of their item total correlation and their face validity for the particular study (Ohly, Sonnentag, Niessen, & Zapf, 2010).

Job insecurity was measured using four items taken from the scale of De Witte (2000), based on Borg and Elizur (1992). Consistent with the majority of studies in this field, the items referred to the worry related to keeping or losing the job as such and not to specific features of the job (De Witte, De Cuyper, Handaja, Sverke, Näswall, & Hellgren, 2010). The items were phrased "It makes me anxious that I might become unemployed," "I worry about the continuation of my job," "I fear that I might lose my job," and "I feel insecure about the future of my job." The Cronbach's alphas, computed separately for each of the three weeks, were .97, .95, and .97, respectively.

Colleague support was measured using four items developed by Peeters, Buunk, and Schaufeli (1995). The items were phrased "This week, my colleagues showed that they liked me," "This week, my colleagues showed that they appreciated the way I do my work," "This week, my colleagues gave me advice on how to handle things," and "This week, my colleagues helped me with a given task." These items tap four different sources of social support (i.e., emotional, appraisal, informational, and instrumental). Consistent with most previous studies (Thoits, 1995), these items were collapsed to form one support factor. The Cronbach's alphas, computed separately for each week, were .72, .70, and .69, respectively.

Apart from the change in the source of support, items for measuring *supervisor support* were identical to those for the measurement of colleague support. Cronbach's alphas, computed separately for each week, were .86, .88, and .87, respectively.

State in-role performance was measured using three items adapted from Goodman and Svyantek (1999). The items were phrased "This week, I fulfilled all the requirements of my job," "This week, I achieved the objectives of my job," and "This week, I performed well in my job by carrying out tasks as expected." The Cronbach's alphas, computed separately for each week, were .75, .86, and .82, respectively.

State extra-role performance was also assessed with three items adapted from Goodman and Svyantek (1999). The items were phrased "This week, I voluntarily did more than was required of me," "This week, I helped my colleagues when they had too much work to do," and "This week, I willingly attended functions not required by the organization." The Cronbach's alphas, computed separately for each week, were .75, .79, and .82, respectively.

Data Analyses

Each participant provided data at the person level (Level 2) (i.e., general in-role and extra-role performance) and at the week level (Level 1) (i.e., state in-role and extra-role performance, job insecurity, supervisor support, and colleague support). Regarding the structure of the data, measurements at the week level (Level 1) were nested within persons (Level 2) since each person was observed on three different occasions. Multilevel analysis, a hierarchical linear modeling approach, was used for analyzing the data, because it accounts for the dependent nature of the measurements at the lower level (Hox, 2002). MLwiN 2.1 (Rasbash, Charlton, Browne, Healy, & Cameron, 2009) was used for data analysis. Person-level predictor variables were centered around the grand mean, and week-level predictor variables were centered around the respective person mean (for a similar approach, see, e.g., Sonnentag, 2003).

For the analyses, 160 measurement points (Level 1) from 56 employees (Level 2) were available. Two dependent variables were used: self-rated weekly in-role performance

and extra-role performance. To test the hypothesized interaction effects, the variables were entered in three steps. After the estimation of the intercept-only model (i.e., the null model that contains no explanatory variables), the stable component of the respective dependent variable (i.e., general in-role or extra-role performance) was entered, together with the state component of the other performance type to account for possible overlap between state in-role and extra-role performance. In addition, the variable time was added to this model (Model 1) to account for a possible linear trend in the dependent variable. Besides the intercept, also the slope of time was allowed to vary across individuals to account for the possibility that individuals have different rates of change in the dependent variable (Hox, 2002). In Model 2, job insecurity, supervisor support, and colleague support were entered. Finally, in Model 3, the job insecurity * supervisor support and job insecurity * colleague support interaction terms were added. The variables used to create the interaction terms were centered around the person-mean prior to analyses (Enders & Tofighi, 2007). The improvement of each model over the previous one was tested using the difference between the respective likelihood ratios. This difference follows a chi-square distribution (degree of freedom equal to the number of new parameters added to the model).

Results

Variability of Week-Level Measures Over Time

Before testing the hypotheses, we examined within-person and between-person variations of the week-level measures across the three weeks by estimating a null model for each variable. The null model provides estimates of within- and between-individual variance for the variable under study (Bryk & Raudenbush, 1992). The results for the null model and attendant variance partitioning are provided in Table I. As shown in the table, 60 percent of variance in colleague support, 53 percent in supervisor support, and 17 percent in job insecurity could be attributed to within-person variation. Furthermore, 58 percent of the variance in in-role performance and 60 percent in extra-role performance were attributable to within-person variation. These findings suggest that in-role and extra-role performance are not stable over time but fluctuate considerably, thereby supporting the application of multilevel analysis.

Test of Hypotheses

Hypothesis 1 stated that job insecurity will be negatively associated with in-role performance. Table II displays model fit information (difference of $-2 \times$ Log), and estimates for the fixed and random parameters. Model 1, which included the control variables (i.e., time, general in-role performance, state extra-role performance), was compared to the null model, which included only the intercept. Model 1 showed a significant improvement over the null model, ($\Delta -2 \times \log = 23.59$, $df = 5$, $p < .001$). General in-role performance and state extra-role performance positively predicted week-level in-role performance. In Model 2, job insecurity and both types of social support were entered. Model 2 showed further improvement over Model 1, ($\Delta - 2 \times \log = 36.87$, $df = 3$, $p < .001$). Supervisor and colleague support contributed significantly to the prediction of week-level in-role performance; their contribution was beyond the effect of general in-role performance. Moreover, in support of Hypothesis 1, weekly fluctuations in job insecurity negatively predicted week-level in-role performance.

In-role and extra-role performance are not stable over time but fluctuate considerably, thereby supporting the application of multilevel analysis.

Hypothesis 2 stated that job insecurity will be negatively associated with extra-role performance. Table III displays the results for week-level extra-role performance as the dependent variable. Model 1, which included the control variables (i.e., time, general extra-role performance, state in-role performance), showed a better fit than

TABLE I **MLwiN Variability Estimates, Between- and Within-Individual Correlations Among Study Variables**

	γ_{00}	ρ^2	τ_{00}	% Within	1	2	3	4	5	6	7
Level-2 variables											
1 General in-role performance	4.41	—	0.27	—	—	—	—	—	—	—	—
2 General extra-role performance	4.11	—	0.38	—	.74**	—	—	—	—	—	—
Level-1 variables											
3 State in-role performance	4.54	0.28	0.20	58%	.46**	.43**	—	.67**	–.77**	.29***	.51***
4 State extra-role performance	3.53	0.73	0.49	60%	.16	.21	.44**	—	–.35***	–.01	.37***
5 Job insecurity	2.72	0.36	1.80	17%	–.56**	–.62**	–.66**	–.25	—	.06	–.14
6 Colleague support	4.27	0.33	0.22	60%	–.11	.09	.07	–.14	.09	—	.17*
7 Supervisor support	3.74	0.52	0.46	53%	.29*	.34*	.44**	.17	–.42**	.33*	—

Note: γ_{00} = pooled intercept representing average level of dependent variable across individuals. ρ^2 = within-individual variance in dependent variable. τ_{00} = between-individual variance in dependent variable. Correlations below the diagonal were computed between individuals, using each participant's mean scores for the level-1 variables. Correlations above the diagonal represent within-individual associations and were computed by standardizing the level-1 regression coefficients for predicting one variable with the other in fixed-effects MLwiN models. $N = 160$ (level 1) and $N = 56$ (level 2).
* $p < 0.05$ (two–tailed); ** $p < 0.01$ (two–tailed); *** $p < 0.001$ (two–tailed).

TABLE II **Fixed-Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting State In-Role Performance**

Parameter	Null Model		Model 1		Model 2		Model 3	
Fixed Effects								
Intercept	4.54	(0.07)	4.53	(0.08)	4.55	(0.08)	4.57	(0.08)
Time			0.01	(0.06)	−0.02	(0.05)	−0.02	(0.05)
General IR performance			0.48***	(0.12)	0.48***	(0.12)	0.48***	(0.12)
State ER performance			0.14*	(0.06)	0.01	(0.06)	0.01	(0.06)
Job insecurity (JI)					−0.21*	(0.08)	−0.21**	(0.07)
Supervisor support (SS)					0.30***	(0.07)	0.30***	(0.07)
Colleague support (CS)					0.18*	(0.08)	0.18*	(0.08)
JI * SS							0.25*	(0.12)
JI * CS							0.08	(0.17)
Random Parameters								
Level 2								
Intercept/intercept	0.20***	(0.06)	0.15*	(0.07)	0.19**	(0.07)	0.19**	(0.07)
Time/time			0.03	(0.04)	0.02	(0.03)	0.02	(0.03)
Time/intercept			−0.01	(0.04)	−0.02	(0.03)	−0.02	(0.03)
Level 1								
Intercept/intercept	0.28***	(0.04)	0.23***	(0.05)	0.16***	(0.03)	0.15***	(0.03)
−2 × log likelihood	309.33		285.73		248.86		244.77	
Difference of –2 × log			23.59***		36.87***		4.09	
df			5		3		2	

Note: Standard errors are in parentheses. IR performance = in-role performance; ER performance = extra-role performance; JI = job insecurity; SS = supervisor support; CS = colleague support.
*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

the null model ($\Delta -2 \times \log = 26.02$, $df = 5$, $p < .001$). State in-role performance was the only significant predictor. After job insecurity and both types of social support were entered into the model as additional predictor variables (Model 3), model fit further improved ($\Delta -2 \times \log = 15.09$, $df = 3$, $p < .01$). Only the estimate of supervisor support was significant. Hence, Hypothesis 2 was not supported in that weekly fluctuations in job insecurity did not significantly predict extra-role performance.

In Hypothesis 3, we predicted that support from colleagues (Hypothesis 3a) and from the supervisor (Hypothesis 3b) would moderate the relationship between job insecurity and in-role performance. As is shown in Table II (Model 3), the estimate of the interaction between week-level job insecurity and supervisor support was significant. The interaction between week-level job insecurity and colleague support, however, was not significant. Hence, only Hypothesis 3b was supported. The within-individual interaction between job insecurity and supervisor support is illustrated graphically in Figure 1 (plotted at one standard deviation above and below the mean for both variables). This plot clearly shows that during weeks in which employees received more support from their supervisor, their in-role performance suffered less from experiencing job insecurity.

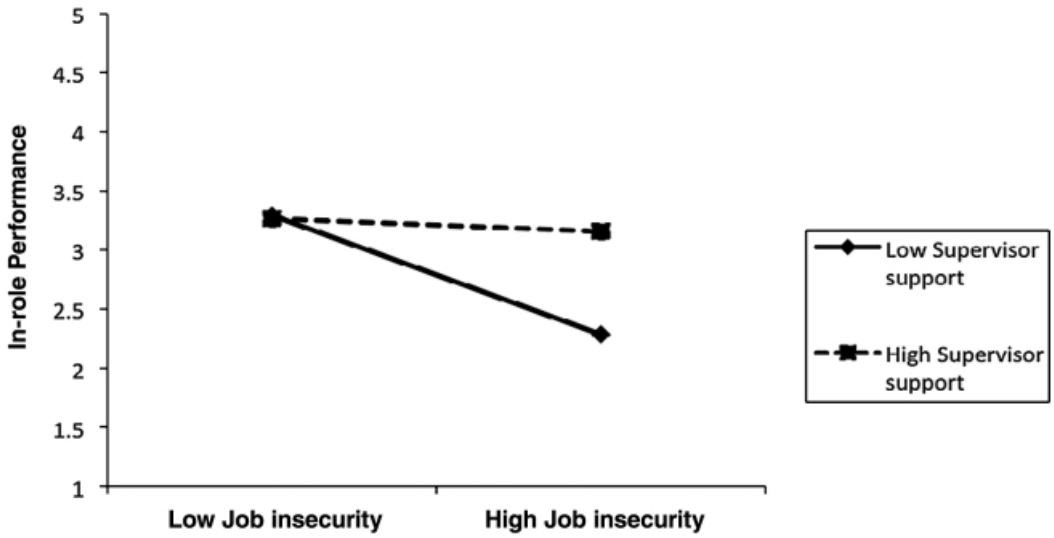

FIGURE 1. The Intra-individual Moderating Effect of Supervisor Support

Note: The two regression lines portray the intra-individual relationship between time-varying job insecurity and in-role performance, across repeated measurements for two hypothetical individuals who report receiving low supervisor support (one standard deviation below the mean on supervisor support for the dashed regression line) and high supervisor support (one standard deviation above the mean on supervisor support for the solid regression line) over the period when job insecurity was assessed.

Hypothesis 4 predicted that support from colleagues (Hypothesis 4a) and from the supervisor (Hypothesis 4b) would moderate the relationship of job insecurity with extra-role performance. However, as can be seen from Table III (Model 3), neither the interaction between job insecurity and colleague support nor the interaction between job insecurity and supervisor support was significant. Hence, no support was found for Hypothesis 4.

Discussion

This study was designed to examine the intra-individual effects of job insecurity on in-role and extra-role performance, and the buffering role of time-varying social support from colleagues and supervisors in this relationship. Participants were recruited from firms that had publicly announced forthcoming restructuring measures.

The results showed a negative intra-individual relationship between job insecurity and in-role performance. During weeks in which individuals felt insecure about their job, they performed worse in terms of meeting organizational objectives and fulfilling the requirements of their job. This finding supports the view that job insecurity is an undesirable work-related demand that interferes with employees' work-goal attainment (Cavenaugh, Boswell, Roehling, & Boudreau, 2000; N. P. Podsakoff, LePine, & LePine, 2007), and is consistent with the majority of (between-subjects) studies that have explored the relationship between job insecurity and job performance (e.g., Armstrong-Stassen, 1993; De Cuyper & De Witte, 2006; Rosenblatt et al., 1999).

Contrary to expectations, no significant negative association was observed between job insecurity and extra-role performance, although the relation was in the predicted direction. Furthermore, we did not find social support from supervisors and from colleagues to interact with job insecurity. These findings suggest that employees do not increase or decrease their discretionary efforts when experiencing job insecurity. One viable explanation is that employees in our sample were intrinsically motivated to perform extra-role tasks, and that this intrinsic motivation was unaffected by the external threat of organizational restructuring. Put differently, it may well be that

TABLE III **Fixed-Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting State Extra-Role Performance**

Parameter	Null Model		Model 1		Model 2		Model 3	
Fixed Effects								
Intercept	3.53	(0.12)	3.64	(0.13)	3.60	(0.13)	3.61	(0.13)
Time			−0.12	(0.09)	−0.09	(0.08)	−0.08	(0.08)
General ER performance			0.32	(0.19)	0.33	(0.18)	0.32	(0.18)
State IR performance			0.35*	(0.15)	0.03	(0.17)	0.01	(0.17)
Job insecurity (JI)					−0.12	(0.13)	−0.12	(0.13)
Supervisor support (SS)					0.46***	(0.12)	0.46***	(0.12)
Colleague support (CS)					−0.17	(0.14)	−0.17	(0.14)
JI * SS							0.23	(0.22)
JI * CS							0.11	(0.30)
Random Parameters								
Level 2								
Intercept/intercept	0.49***	(0.15)	0.54**	(0.21)	0.47*	(0.19)	0.48*	(0.19)
Time/time			0.10	(0.09)	0.03	(0.08)	0.03	(0.08)
Time/intercept			−0.06	(0.11)	0.02	(0.09)	0.01	(0.09)
Level 1								
Intercept/intercept	0.73***	(0.10)	0.54***	(0.11)	0.51***	(0.10)	0.50***	(0.10)
−2 x log likelihood	463.29		437.27		422.18		420.96	
Difference of −2 x log			26.02***		15.09**		1.22	
df			5		3		2	

Note: Standard errors are in parentheses. IR performance = in-role performance; ER performance = extra-role performance; JI = job insecurity; SS = supervisor support; CS = colleague support.
*$p < .05$. **$p < .01$. ***$p < .001$.

employees enjoy their extra-role tasks and perform them by choice and not out of necessity. Indirect support for this position has been provided by Bakker (2008, p. 400), who found a positive association between flow (i.e., "a state of consciousness where people become totally immersed in activity, and enjoy it intensely") and extra-role performance.

An alternative and somewhat contrary explanation is that when jobs are on the line, employees are afraid to make a bad impression on their supervisor by lowering their levels of extra-role performance. Employees might be worried that drops in extra-role performance in response to job insecurity may be quickly noticed and interpreted by their supervisor as a lack of commitment to the organization, probably resulting in dismissal, and therefore decide to maintain their discretionary efforts. According to this explanation, employees would engage in extra-role behavior, but would do so primarily for self-interest motives, such as a desire to give a favorable impression to superiors (Bolino, 1999). A similar idea was developed by Deutsch Salamon and Deutsch (2006), who suggested that employees may engage in extra-role behavior at strategic times and in strategic ways to bolster their reputations as helpful, capable contributors. Indeed, several studies

have shown that some forms of extra-role behavior are predicted by impression management motives (Bowler & Brass, 2006; Eastman, 1994; Finkelstein, 2006; Snell & Wong, 2007). Further research is needed to determine which of these explanations is more viable.

As hypothesized, supervisor support moderated the intra-individual relationship between job insecurity and in-role performance, so that employees' in-role performance suffered less from feeling job-insecure during weeks in which they received more support from their supervisor. The interaction between week-level job insecurity and colleague support was not significant. This result goes against the finding of Peeters and Le Blanc (2001) but appears somewhat in line with other studies indicating supervisor support to be more helpful than collegial support (e.g., Dormann & Zapf, 1999). Possibly, employees are more sensitive to and influenced by their supervisor than by their colleagues. For example, receiving support from the supervisor may signal a good supervisor–employee relation, which, in turn, translates more easily into less pronounced feelings of job insecurity. In a related vein, the buffering potential of supervisor support may be stronger than that of work colleagues, since the supervisor is the only person who has the position of power to alter or transform the working situation at hand (Dormann & Zapf, 1999; Peeters & Le Blanc, 2001). This explanation appears in line with Cohen and Wills (1985), who argued that social support does not always act as a buffer, only when the support provided corresponds to the threatened need. Along these lines, collegial support appears less effective because job insecurity poses a specific threat that only supervisors, thanks to their position in power, may be able to alleviate (Dormann & Zapf, 1999).

By examining the buffering role of supervisor and colleague support, we responded to recent calls for studies that seek to understand the role of the work context in explaining job performance.

Another possibility that needs further investigation is that support from colleagues does not have a stress-reducing effect because discussing and comparing one's job situation may be detrimental to one's relationship with others. This seems especially likely when employees are in competition for a reduced number of jobs. In such competitive work environments, the information received during social comparison with colleagues may result in more harm than good (Cohen & McKay, 1984).

Strengths, Limitations, and Suggestions for Future Research

This study is innovative in a number of ways. First, unlike previous job insecurity studies that have used between-subjects designs, we used a within-subject design to examine the relationship between job insecurity, social support, and job performance. This choice was grounded in the assumption that these variables vary meaningfully within individuals over time, and this assumption was borne out by the present study. In such case, intra-individual analyses are preferred to inter-individual analyses (Molenaar & Campbell, 2009). Second, by examining the buffering role of supervisor and colleague support, we responded to recent calls for studies that seek to understand the role of the work context in explaining job performance (Rosen et al., 2010).

Like any study, our study has potential limitations. A first possible limitation is that all constructs were measured by means of self-report, which raises the question of whether common method bias may explain the results. However, by person-centering week-level predictor variables, an important source of common method variance was eliminated—namely, inflated relationships between self-rated scores due to individual differences in response tendencies. Furthermore, common method bias is less likely to be a serious concern when interaction effects are observed (Evans, 1985), and when constructs are measured over time (P. M. Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Nevertheless, future research may benefit from using multisource assessments, for instance by including colleague and

supervisor assessments of the level of support they provided for the employee and of the employee's job performance.

Second, the possibility of reverse causation cannot be ruled out by our methodology. We have argued that job insecurity leads employees to have poorer performance, whereas, in fact, it could be speculated that doing a poor job leads individuals to have more concerns about their future careers. However, our results were in line with theory and with empirical evidence showing that job insecurity does influence performance (Armstrong-Stassen, 2002).

Third, because of this study's focus on within-person changes in job insecurity and job performance, we restricted our analysis to the individual level and did not include, for example, organizational-level measures. However, it may be possible that organizational factors, such as corporate culture, influence the relationship between job insecurity and performance, above and beyond supervisor and colleague support. Future research could thus study how organizational and individual factors simultaneously shape the implications of job insecurity.

Finally, our sample is limited in that it involves mainly younger employees who have, on average, relatively short tenure. Because research suggests that age and tenure influence the outcomes of job insecurity (Cheng & Chan, 2008), future research could examine whether our findings also hold for older employees and for employees with longer tenure.

More generally, researchers could start testing more complex within-person models on job insecurity and job performance, along the lines outlined in this article. For example, it can be theorized that psychological strain at work is the mediating construct between job insecurity and performance as moderated by support. Additionally, the stress of job insecurity may spill over to the nonwork domain (e.g., Westman, Etzion, & Danon, 2001), which in turn may influence how well employees perform their jobs (e.g., Frone, Yardley, & Markel, 1997).

Another possible path of inquiry would be to assess whether the strength of the job insecurity–performance relationship is contingent on the type of restructuring. Perhaps performance levels suffer most in the context of downsizing—perceived by employees as a violation of the psychological contract (Morrison & Robinson, 1997)—and less so for other types of restructuring. Testing such complex models, however, requires significantly larger sample sizes than we had in our study (Preacher, Rucker, & Hayes, 2007).

Practical Implications

This study, using a within-subject design to examine the relationship between job insecurity, social support, and job performance, showed that these constructs vary meaningfully within individuals over time. This finding underlines the idea that a one-shot approach to measuring or reducing job insecurity, or buffering its negative effect, is unlikely to be successful. Instead, HRM processes are needed for the regular and sustained monitoring of employees, in particular in times of restructuring and change. This might allow HRM professionals and managers to identify increases in job insecurity early and would make it easier to intervene at the right time (Hackman & Wageman, 2005). With this, we mean that HRM professionals need to monitor employees' affective reactions to change more frequently (e.g., by means of short questionnaires administered via the Internet), in order to spot and counteract increases in job insecurity in time. Further, HRM could try to reframe organizational restructuring into opportunities for development and personal growth. This may reduce job insecurity and instead increase subjective security (through perceived employability) (van den Heuvel, Demerouti, Schreurs, Bakker, & Schaufeli, 2009).

HRM professionals need to monitor employees' affective reactions to change more frequently (e.g., by means of short questionnaires administered via the Internet), in order to spot and counteract increases in job insecurity in time.

The results of this study also highlight the importance of supervisor support within

organizations, especially in difficult times of restructuring and organizational change, for better enabling both individual goal attainment and ultimate organizational performance. The buffering effect of supervisor support suggests that providing training to managers on supportive leadership may help maintain job performance. Supportive leadership entails that leaders express concern for and are sensitive to the needs of employees (Rafferty & Griffin, 2006). Training focusing on supportive leadership should enable managers to use motivational tools, such as legitimizing change, providing accurate and timely information on the change, and involving employees in the change process (Ford, Ford, & D'Amelio, 2008; Herold, Fedor, Caldwell, & Liu, 2008). Managers may also need to learn how to help employees make sense of the change process and how to provide employees with a sense of continuity as balance to the uncertainties of organizational change (Maitlis & Sonenshein, 2010).

Further potential to alleviate job insecurity may lie in clarifying performance criteria and managerial expectations, as this may counteract feelings of ambiguity and uncertainty in employees not knowing for sure how secure their job is (Binyamin & Carmeli, 2010). We realize that in times of restructuring it may become increasingly difficult for managers to provide this support. However, as already emphasized by Grunberg et al. (2006) in this journal, it is important for organizations to provide direct assistance for managers who need to deal with restructuring. Superiors of managers can play a vital role in this in encouraging managers that they can lead employees through difficult times (Paglis & Green, 2002). HRM is equally important in that it needs formal HRM initiatives designed to foster change management competencies (e.g., training courses), but also informal HRM initiatives that provide support to managers leading change (e.g., peer-to-peer support groups).

Conclusion

In this article, we took a within-individual approach to examine the relationship between job insecurity and job performance, and the buffering role of work-based social support in this relationship. We found that, in times of restructuring, job insecurity varies significantly within individuals from week to week, and that job insecurity is negatively related to in-role job performance, so that employees perform worse in weeks in which they feel more insecure as compared to weeks in which they feel secure. In addition, we found that this negative intra-individual relationship is less pronounced when employees feel supported by their supervisor. From this we conclude that restructuring organizations may benefit, among others, from regularly monitoring employees' levels of job insecurity and from developing training programs to assist supervisors in helping employees cope with an insecure and changing work environment.

Note

1. In Belgium, almost half the working population is registered as union members (see Brewster, 2007). However, according to Brewster, the meaning of unionization and being unionized is considerably different in Belgium than in the United States. For instance, legislation in Belgium requires employers to recognize government and unions for collective bargaining and requires the establishment of employee representation committees in all larger organizations. In practice, this means that organizations, together with government and unions, use collective bargaining to settle for rules in times of restructuring (e.g., seniority rules for layoffs).

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